The 2006 Boreal Forest Fire Season as seen by OMI

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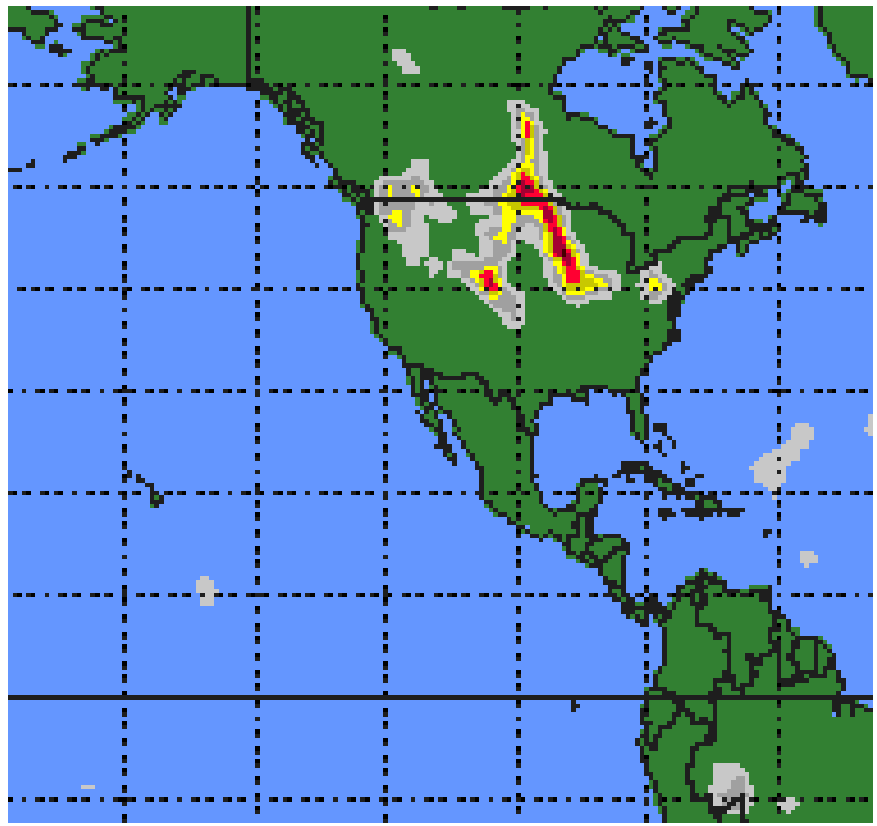
Aura Science Meeting
Aerosols/Cloud/SO2 group
9-12-2006



OMI Aerosol Index 09-06-06

OMI Near UV Aerosol Algorithm (OMAERUV)

Products:
-Near UV Aerosol Index
-Extinction Optical Depth, AOD (388 nm)
-Absorption Optical Depth, AAOD (388 nm)
-AOD and AAOD reported also at 354 and 500 nm

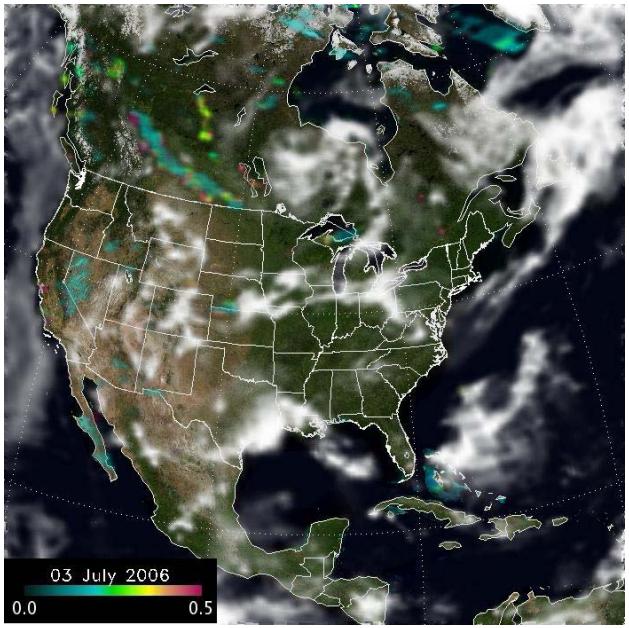
Two sets of AOD and AAOD are reported

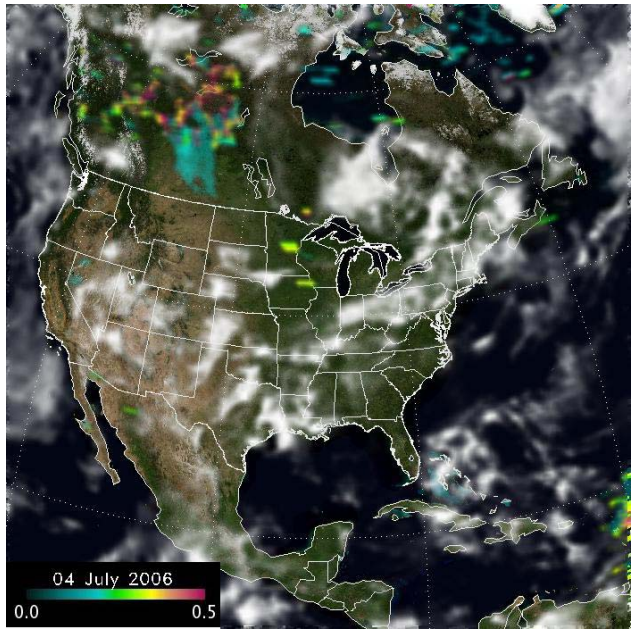
Set 1: As a function of assumed aerosol layer height above surface: 0.0, 1.5, 3.0. 6.0 and 10.0 km

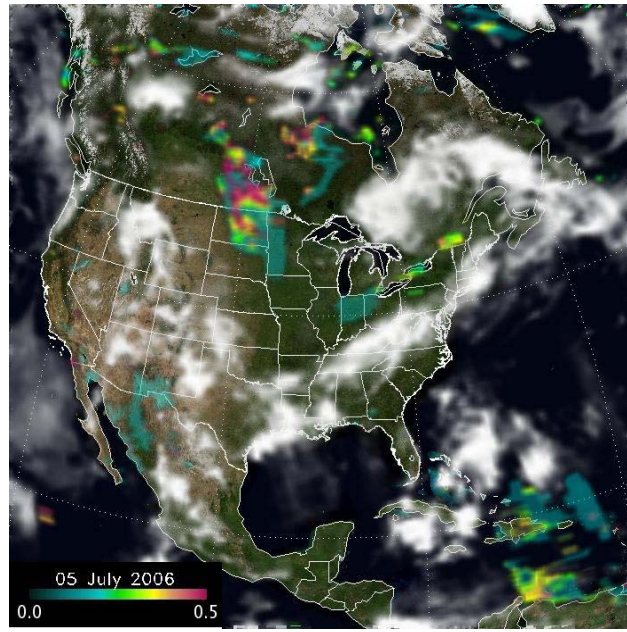
Set 2: Recommended values for a particular assumption on aerosol layer height.

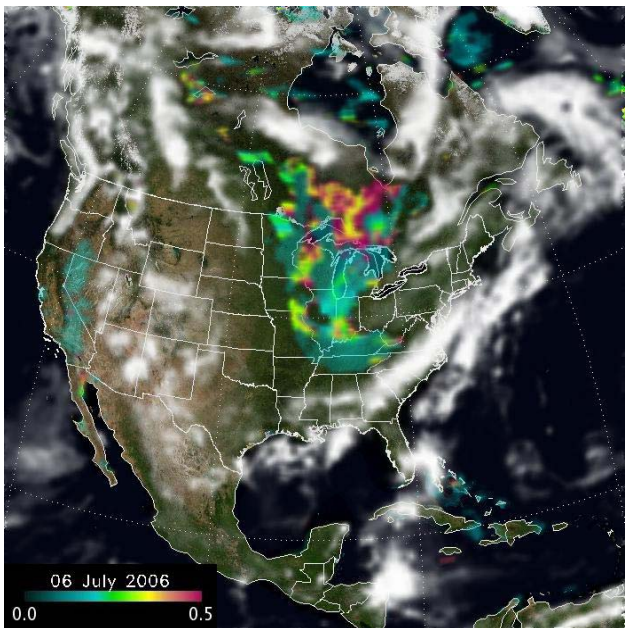
For boreal forest fires the aerosol layer is assumed to be at 6.0 km

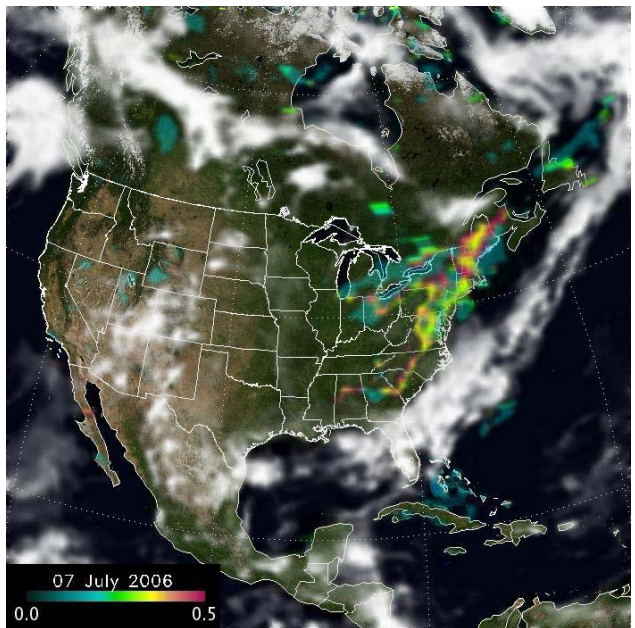
Absorption Optical Depth (388 nm), July 3-8, 2006

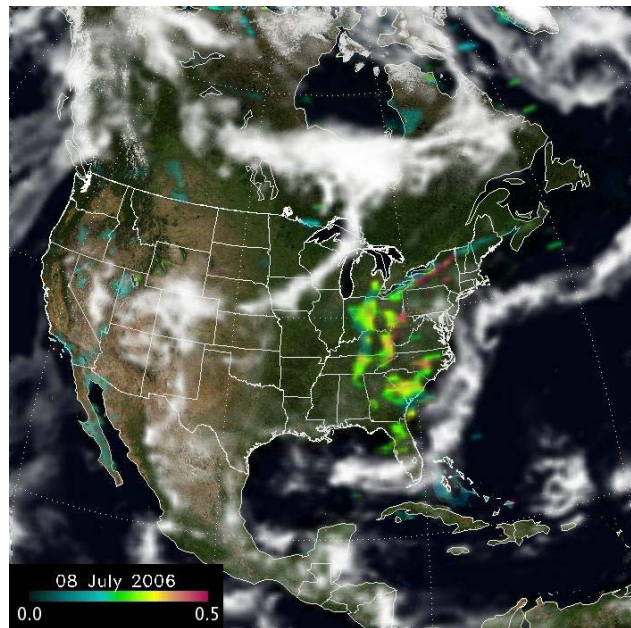








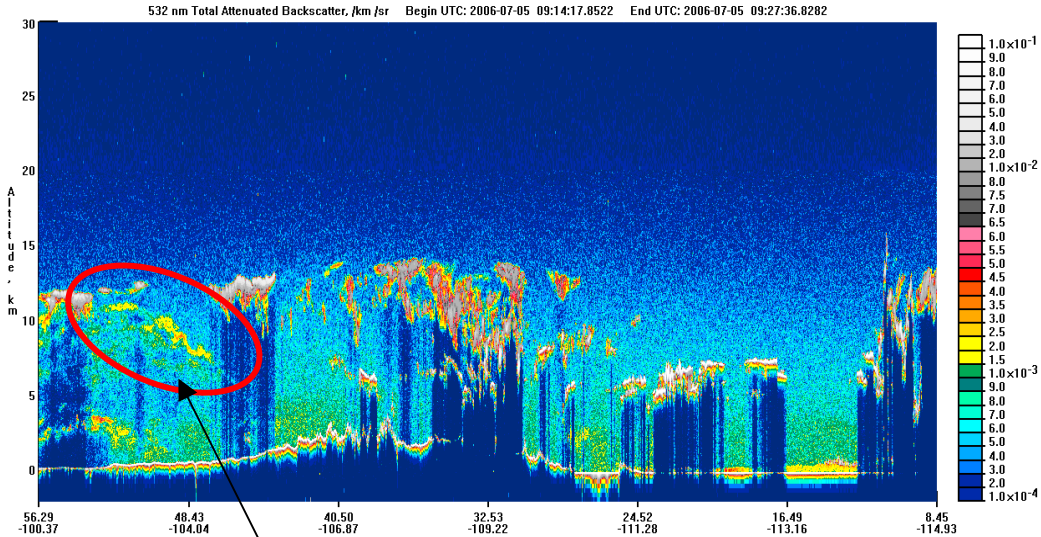




OMI and CALIPSO Observations on July 5 and 7

Credits: CALIPSO Science Team

5



Aerosols between 7 and 10 km

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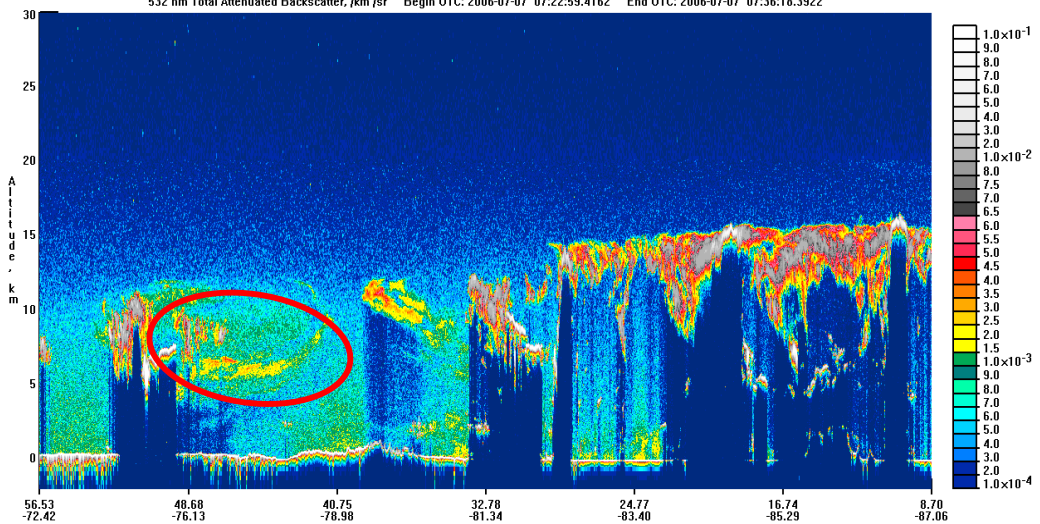
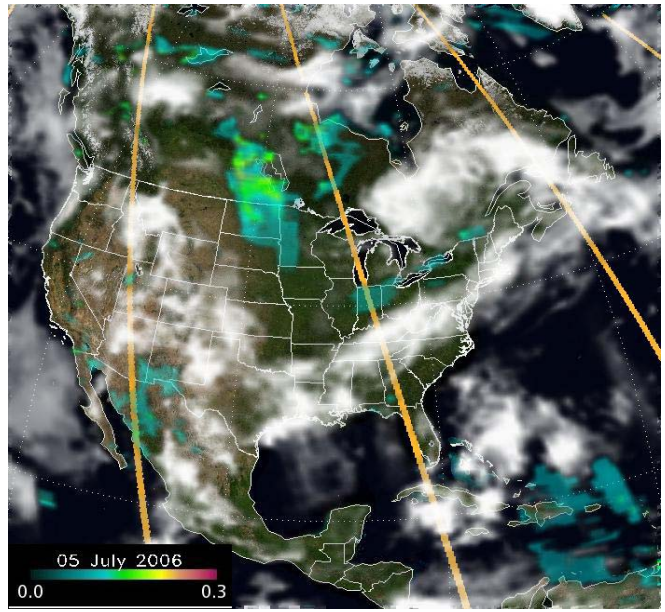
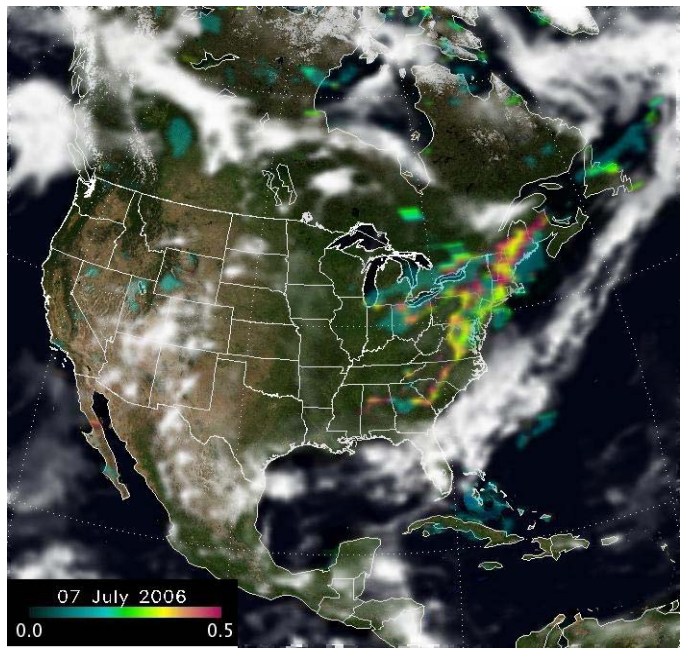
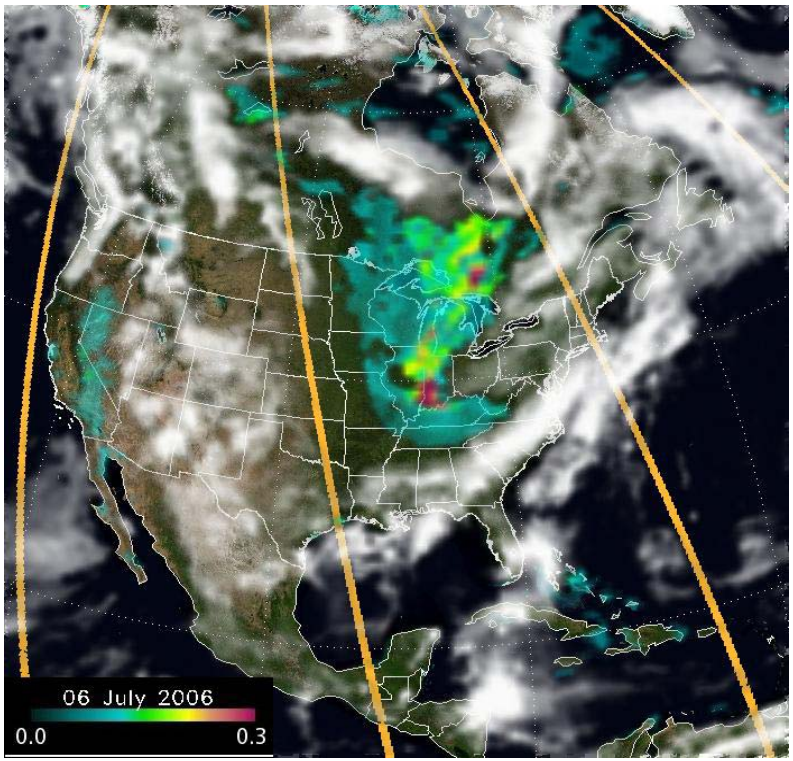


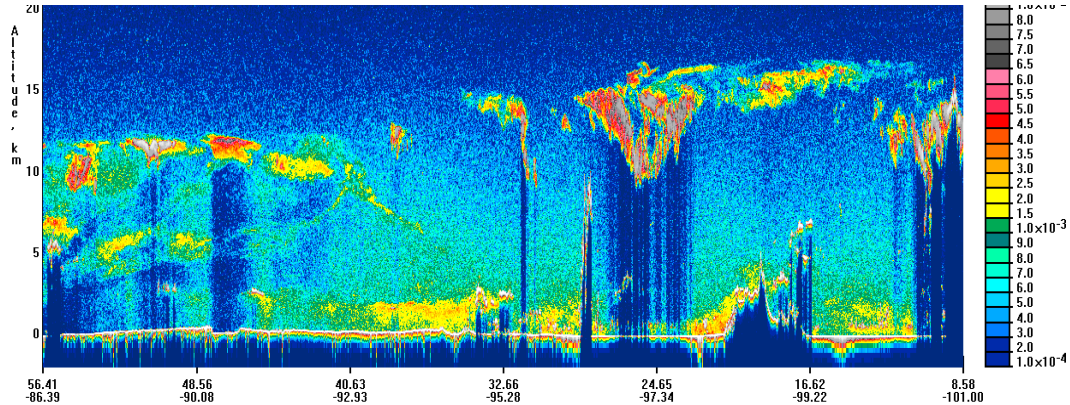


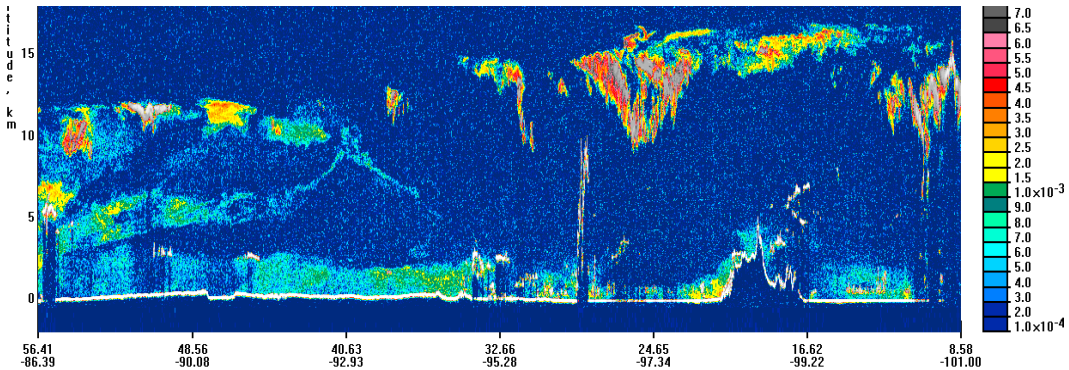


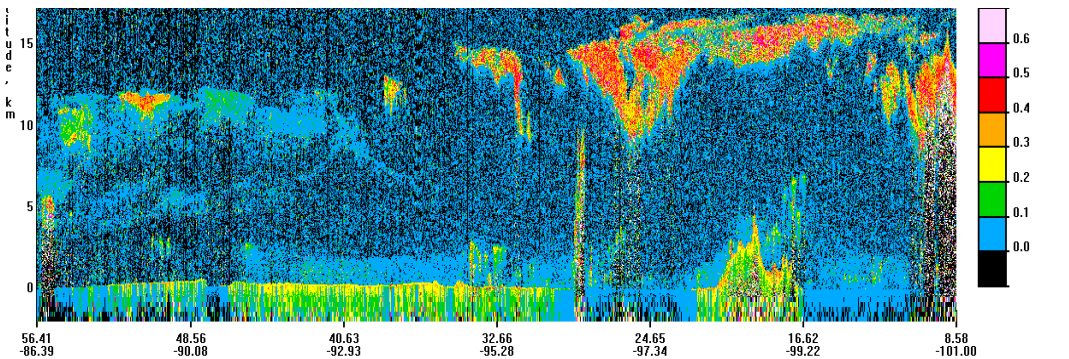
July 10

Credits: CALIPSO Science Team

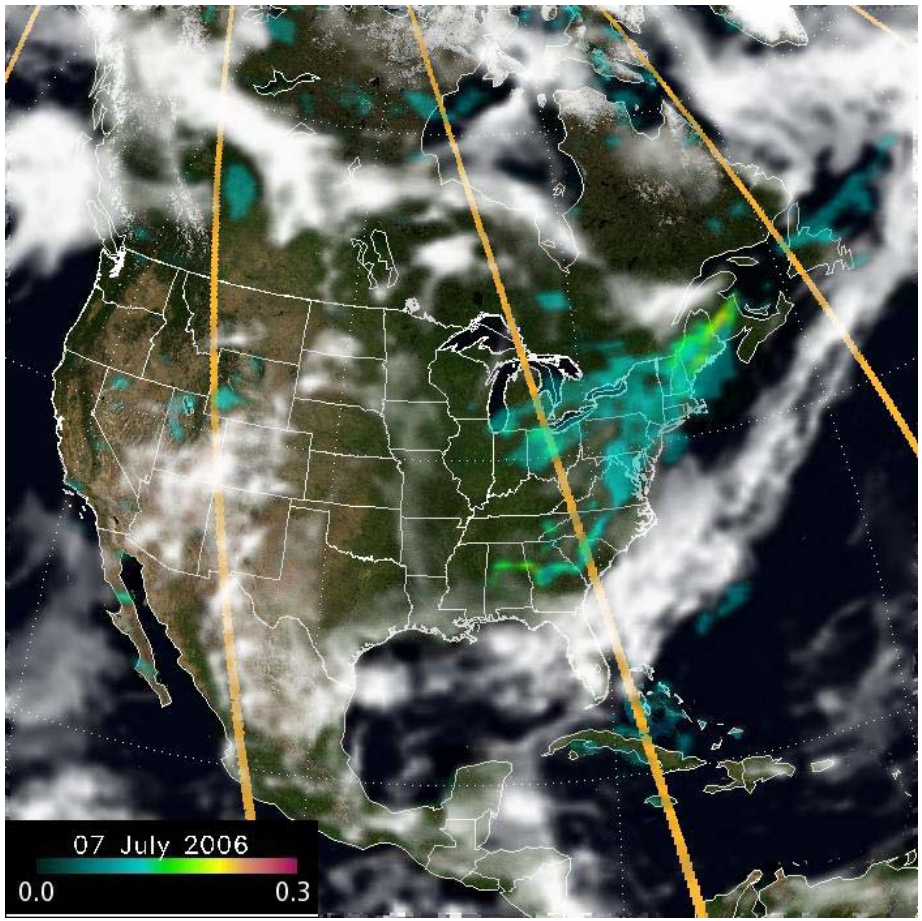


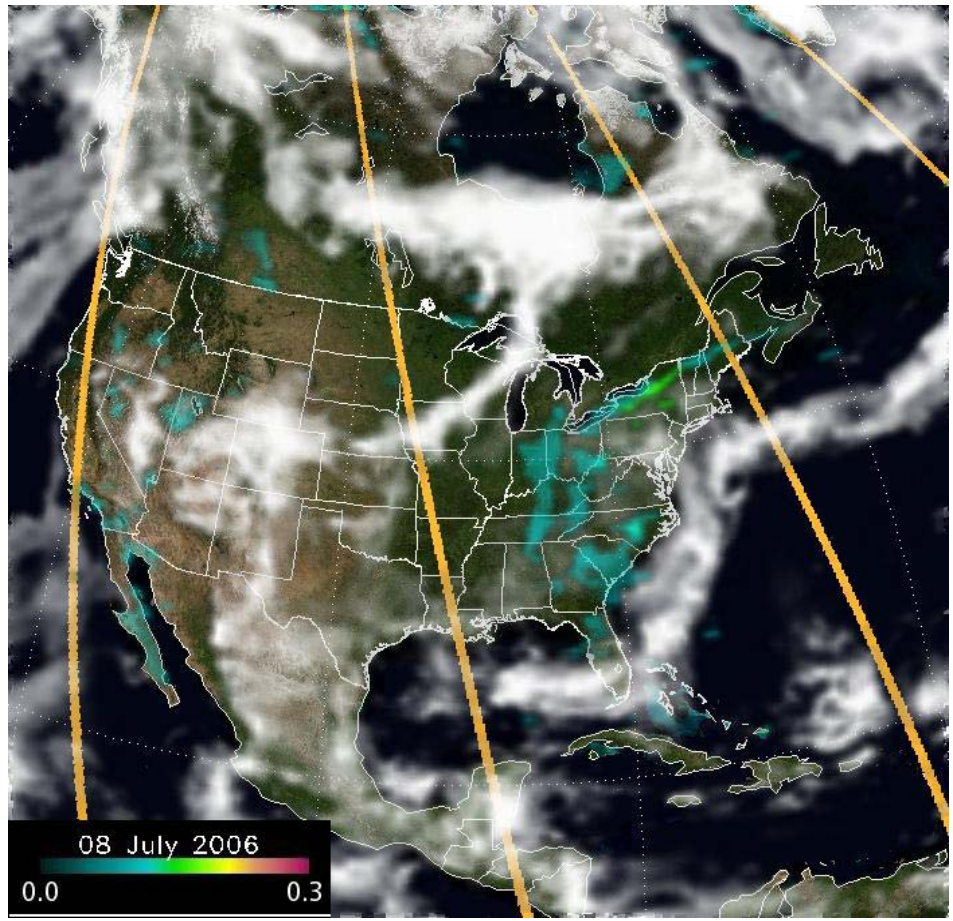






Arrival to the East Coast (July 7 and 8)

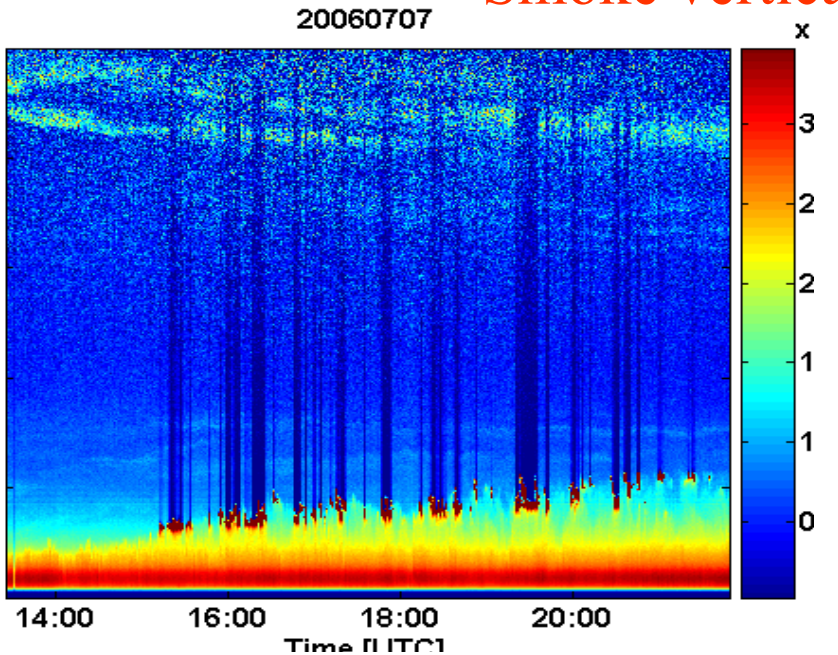


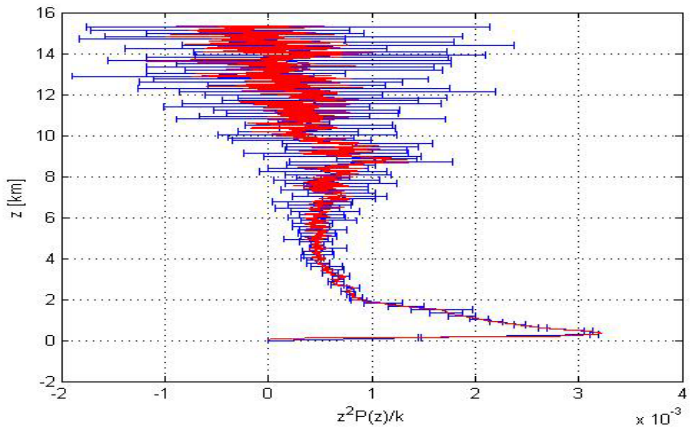


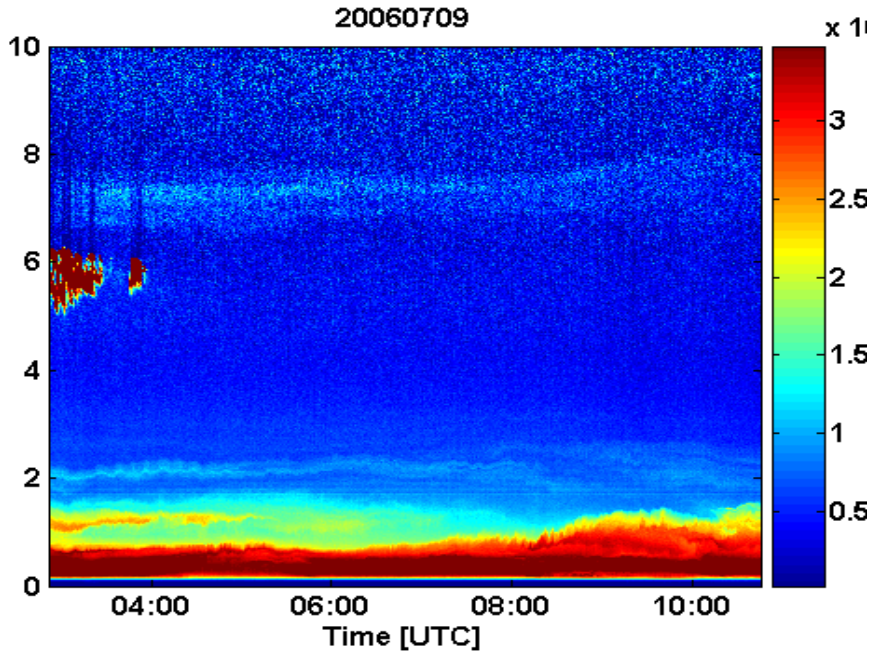
(10 km retrievals)

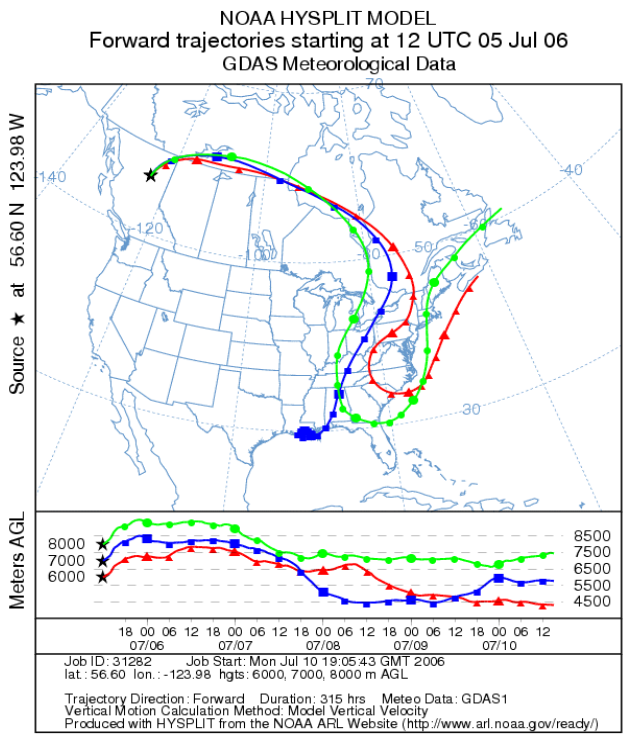
Smoke vertical distribution over UMBC

Credits Ray Rogers/UMBC

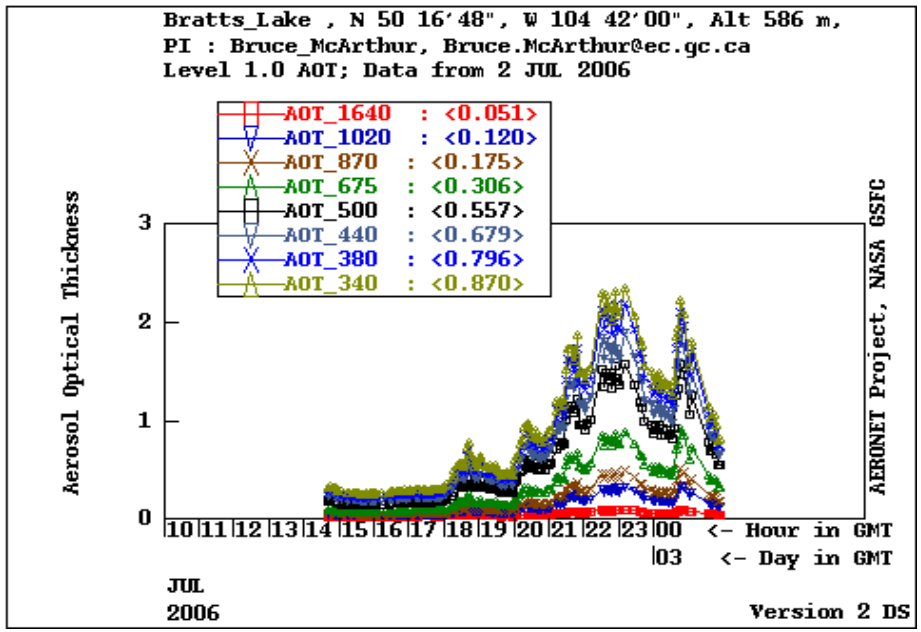


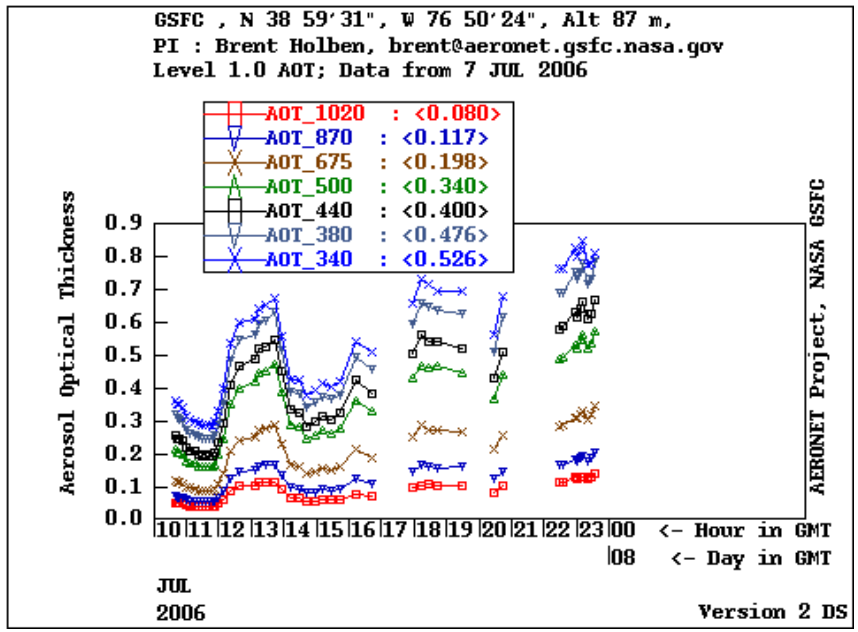


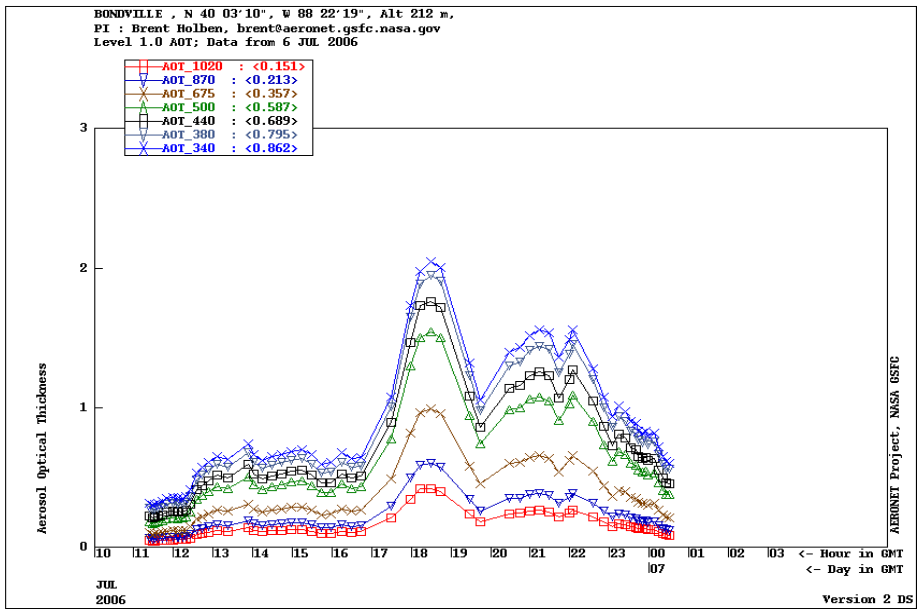


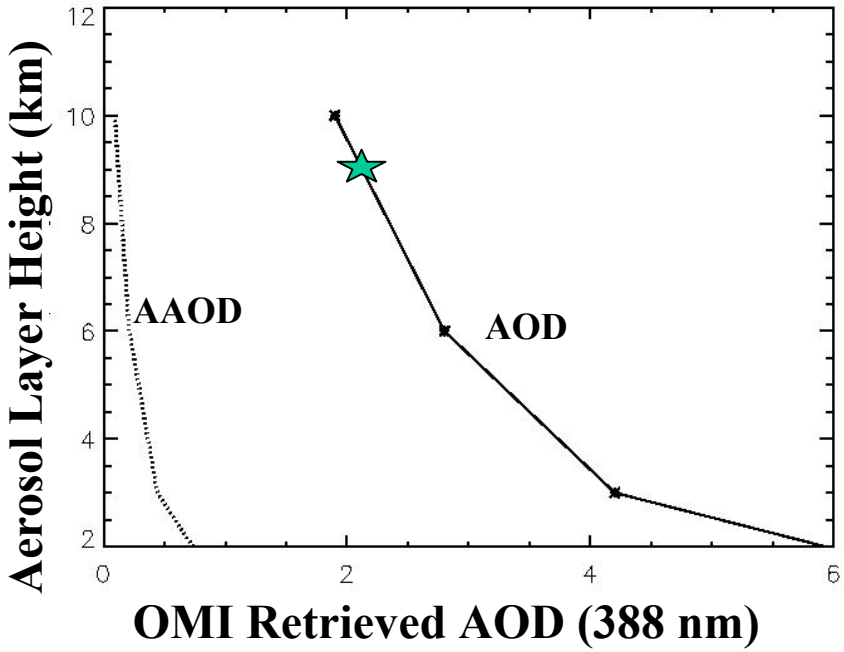


The Canadian smoke layer as detected from the ground

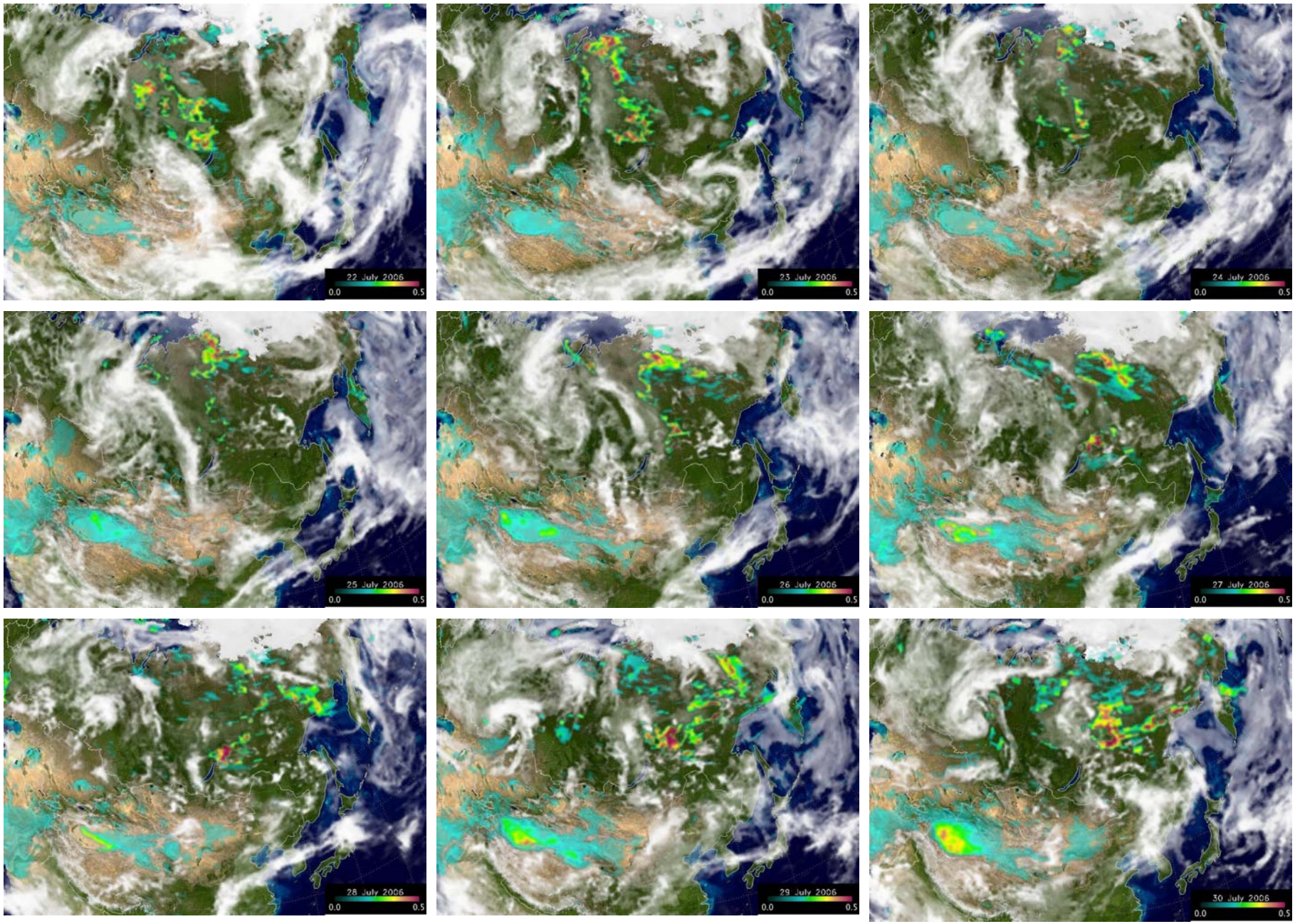








Forests Fires in Siberia July 23-30, 2006



Aeronet measurements on the path of the smoke layer